

**Abstract of the Disclosure**

A method of optimizing malignancy therapy includes surgical removal or reduction of the body burden of malignant cells and retention of some of those cells for subsequent use in immunotherapy. Radiotherapy may be employed at a radiation dosage below the threshold for normal tissue necrosis but on a correspondingly faster schedule than is the present United States standard to provide preservation of normal tissue structure. Normal tissue tolerable limits for one fraction are in the range of 10 - 13 Gy or Gy-Eq. The removed tumor cells are altered genetically to enhance their immunogenicity and also altered ex vivo by radiation or by any other means to render them incapable of sustained clonogenic propagation and then are re-injected using multiple sequenced injections.